

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

| Application Serial Number: | 10/6/6.009 |
|----------------------------|------------|
| Source: | 9/2/05 |
| Date Processed by STIC: | 9/2/05 |

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,

2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE <u>CHECKER</u> <u>VERSION 4.2.2 PROGRAM</u>, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

- 1. EFS-Bio (http://www.uspto.gov/ebc/efs/downloads/documents.htm, EFS Submission User Manual ePAVE)
- 2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
- 3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):
 U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building. 401 Dulany Street.
 Alexandria. VA 22314

Revised 01/24/05:



Raw Sequence Listing Error Summary

| ERROR DETECTED | SUGGESTED CORRECTION SERIAL NUMBER: 10/6/6,009 |
|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ATTN: NEW RULES CASES | : PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE |
| lWrapped Nucleics Wrapped Aminos | The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping." |
| 2Invalid Line Length | The rules require that a line not exceed 72 characters in length. This includes white spaces. |
| 3Misaligned Amino Numbering | The numbering under each 5 th amino acid is misaligned. Do not use tab codes between numbers: use space characters, instead. |
| 4Non-ASCII | The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text. |
| 5Variable Length | Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing. |
| 6Patentin 2.0 "bug" | A "bug" in Patentln version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) |
| 7Skipped Sequences (OLD RULES) | Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped |
| | Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences. |
| (NEW RULES) | Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000 |
| NEW RULES) | Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents. |
| Response | Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence |
| | Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknowp." Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules) |
| "bug" | Please do not use "Copy to Disk" function of Patentin version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk. |
| 13 Misuse of n/Xaa ' | 'n" can only represent a single nucleotide; "Xaa" can only represent a single amino acid |





IFW16

Input Set : D:\ISIS-5138.ST25.txt

```
3 <110> APPLICANT: Crooke, Stanley T.
         Lima, Walter F.
         Wu, Hongjiang
 7 <120> TITLE OF INVENTION: HUMAN RNASE H1 AND OLIGONUCLEOTIDE COMPOSITIONS THEREOF
 9 <130> FILE REFERENCE: ISIS-5138
11 <140> CURRENT APPLICATION NUMBER: US 10/616,009
12 <141> CURRENT FILING DATE: 2003-07-08
14 <150> PRIOR APPLICATION NUMBER: US 09/409,926
15 <151> PRIOR FILING DATE: 1999-09-30
                                                                Does Not Comply
17 <160> NUMBER OF SEQ ID NOS: 72
                                                             Orrected Diskette Neede
19 <170> SOFTWARE: PatentIn version 3.3
21 <210> SEQ ID NO: 1
22 <211> LENGTH: 286
23 <212> TYPE: PRT
24 <213> ORGANISM: Human
26 <400> SEQUENCE: 1
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                                        10
                   5
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32 Pro Cys Arg Arg Gly Ser Arg Gly Phe Gly Met Phe Tyr Ala Val Arg
                                    25
33
               20
36 Arg Gly Arg Lys Thr Gly Val Phe Leu Thr Trp Asn Glu Cys Arg Ala
                               40 .
40 Gln Val Asp Arg Phe Pro Ala Ala Arg Phe Lys Lys Phe Ala Thr Glu
                           55
44 Asp Glu Ala Trp Ala Phe Val Arg Lys Ser Ala Ser Pro Glu Val Ser
45 65
48 Glu Gly His Glu Asn Gln His Gly Gln Glu Ser Glu Ala Lys Pro Gly
                                        90
                   85
49
52 Lys Arg Leu Arg Glu Pro Leu Asp Gly Asp Gly His Glu Ser Ala Gln
                                    105
56 Pro Tyr Ala Lys His Met Lys Pro Ser Val Glu Pro Ala Pro Pro Val
                               120
57
           115
60 Ser Arg Asp Thr Phe Ser Tyr Met Gly Asp Phe Val Val Val Tyr Thr
                           135
       130
61
64 Asp Gly Cys Cys Ser Ser Asn Gly Arg Arg Lys Pro Arg Ala Gly Ile
65 145
                       150
68 Gly Val Tyr Trp Gly Pro Gly His Pro Leu Asn Val Gly Ile Arg Leu
                                        170
69
72 Pro Gly Arg Gln Thr Asn Gln Arg Ala Glu Ile His Ala Ala Cys Lys
                                   185
               180
73
76 Ala Ile Glu Gln Ala Lys Thr Gln Asn Ile Asn Lys Leu Val Leu Tyr
                               200
77
           195
80 Thr Asp Ser Met Phe Thr Ile Asn Gly Ile Thr Asn Trp Val Gln Gly
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Input Set : D:\ISIS-5138.ST25.txt

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220
       210
                            215
81
84 Trp Lys Lys Asn Gly Trp Lys Thr Ser Ala Gly Lys Glu Val Ile Asn
                       230
                                            235
85 225
88 Lys Glu Asp Phe Val Ala Leu Glu Arg Leu Thr Gln Gly Met Asp Ile
                                                            255
                                        250
89
                   245
92 Gln Trp Met His Val Pro Gly His Ser Gly Phe Ile Gly Asn Glu Glu
                                                        270
               260
                                    265
93
96 Ala Asp Arg Leu Ala Arg Glu Gly Ala Lys Gln Ser Glu Asp
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97
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                                280
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101 <211> LENGTH: 293
102 <212> TYPE: PRT
103 <213> ORGANISM: Chicken
105 <400> SEQUENCE: 2
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108 1
111 Lys Gly Gly Met Phe Tyr Ala Val Arg Lys Gly Arg Gln Thr Gly
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                                     25
112
115 Val Tyr Arg Thr Trp Ala Glu Cys Gln Gln Gln Val Asn Arg Phe Pro
            35
116
119 Ser Ala Ser Phe Lys Lys Phe Ala Thr Glu Lys Glu Ala Trp Ala Phe
120
        50
123 Val Gly Ala Gly Pro Pro Asp Gly Gln Gln Ser Ala Pro Ala Glu Thr
                                             75
124 65
                        70
127 His Gly Ala Ser Ala Val Ala Gln Glu Asn Ala Ser His Arg Glu Glu
                                         90
128
                    85
131 Pro Glu Thr Asp Val Leu Cys Cys Asn Ala Cys Lys Arg Pro Tyr Glu
                                     105
132
                100
135 Gln Ser Thr Asn Glu Glu His Thr Val Arg Arg Ala Lys His Asp Glu
                                 120
136
            115
139 Glu Gln Ser Thr Pro Val Val Ser Glu Ala Lys Phe Ser Tyr Met Gly
140
        130
                            135
143 Glu Phe Ala Val Val Tyr Thr Asp Gly Cys Cys Ser Gly Asn Gly Arg
                        150
144 145
147 Asn Arg Ala Arg Ala Gly Ile Gly Val Tyr Trp Gly Pro Gly His Pro
                    165
                                         170
148
151 Leu Asn Ile Ser Glu Arg Leu Pro Gly Arg Gln Thr Asn Gln Arg Ala
                180
152
155 Glu Ile His Ala Ala Cys Lys Ala Ile Glu Gln Ala Lys Ser Gln Asn
                                 200
                                                     205
156
            195
159 Ile Lys Lys Leu Ile Ile Tyr Thr Asp Ser Lys Phe Thr Ile Asn Gly
160
                            215
        210
163 Ile Thr Ser Trp Val Glu Asn Trp Lys Thr Asn Gly Trp Arg Thr Ser
                                             235
                        230
167 Ser Gly Gly Ser Val Ile Asn Lys Glu Asp Phe Gln Lys Leu Asp Ser
                                         250
                                                              255
168
                    245
171 Leu Ser Lys Gly Ile Glu Ile Gln Trp Met His Ile Pro Gly His Ala
                                     265
                                                          270
                260
172
175 Gly Phe Gln Gly Asn Glu Glu Ala Asp Arg Leu Ala Arg Glu Gly Ala
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Input Set : D:\ISIS-5138.ST25.txt

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            275
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184 <211> LENGTH: 348
185 <212> TYPE: PRT
186 <213> ORGANISM: Yeast
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195
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                                    25
198 Gly Gly Ala Ile Tyr Lys Lys Phe Asn Ser Tyr Glu Gln Ala Lys Ser
            35
199
202 Phe Leu Gly Gln Pro Asn Thr Thr Ser Asn Tyr Gly Ser Ser Thr His
203
                            55
        50
206 Ala Gly Gly Gln Val Ser Lys Pro His Thr Thr Gln Lys Arg Val His
                                             75
207 65
                        70
210 Arg Arg Asn Arg Pro Leu His Tyr Ser Ser Leu Thr Ser Ser Ser Ala
211
214 Cys Ser Ser Leu Ser Ser Ala Asn Thr Asn Thr Phe Tyr Ser Val Lys
                                    105
                                                         110
215
                100
218 Ser Asn Val Pro Asn Ile Glu Ser Lys Ile Phe Asn Asn Trp Lys Asp
219
            115
                                120
222 Cys Gln Ala Tyr Val Lys His Lys Arg Gly Ile Thr Phe Lys Lys Phe
                            135
223
        130
226 Glu Asp Gln Leu Ala Ala Glu Asn Phe Ile Ser Gly Met Ser Ala His
                        150
                                             155
                                                                 160
227 145
230 Asp Tyr Lys Leu Met Asn Ile Ser Lys Glu Ser Phe Glu Ser Lys Tyr
                    165
                                         170
231
234 Lys Leu Ser Ser Asn Thr Met Tyr Asn Lys Ser Met Asn Val Tyr Cys
                180 185
238 Asp Gly Ser Ser Phe Gly Asn Gly Thr Ser Ser Ser Arg Ala Gly Tyr
                                200
            195
239
242 Gly Ala Tyr Phe Glu Gly Ala Pro Glu Glu Asn Ile Ser Glu Pro Leu
                            215
                                                 220
243
        210
246 Leu Ser Gly Ala Gln Thr Asn Asn Arg Ala Glu Ile Glu Ala Val Ser
                        230
                                             235
250 Glu Ala Leu Lys Lys Ile Trp Glu Lys Leu Thr Asn Glu Lys Glu Lys
                                        250
                                                             255
251
254 Val Asn Tyr Gln Ile Lys Thr Asp Ser Glu Tyr Val Thr Lys Leu Leu
                                                       · 270
                260
                                    265
255
258 Asn Asp Arg Tyr Met Thr Tyr Asp Asn Lys Leu Glu Gly Leu Pro
                                280
            275
262 Asn Ser Asp Leu Ile Val Pro Leu Val Gln Arg Phe Val Lys Val Lys
                                                 300
        290
                            295
263
266 Lys Tyr Tyr Glu Leu Asn Lys Glu Cys Phe Lys Asn Asn Gly Lys Phe
                                             315
                                                                 320
                        310
267 305
270 Gln Ile Glu Trp Val Lys Gly His Asp Gly Asp Pro Gly Asn Glu Met
```

Input Set : D:\ISIS-5138.ST25.txt

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281 <213> ORGANISM: E.coli
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                20
293 Lys Thr Phe Ser Ala Gly Tyr Thr Arg Thr Thr Asn Asn Arg Met Glu
294
            35
297 Leu Met Ala Ala Ile Val Ala Leu Glu Ala Leu Lys Glu His Cys Glu
298
        50
                             55
301 Val Ile Leu Ser Thr Asp Ser Gln Tyr Val Arg Gln Gly Ile Thr Gln
                                             75
305 Trp Ile His Asn Trp Lys Lys Arg Gly Trp Lys Thr Ala Asp Lys Lys
                    85
                                         90
306
309 Pro Val Lys Asn Val Asp Leu Trp Gln Arg Leu Asp Ala Ala Leu Gly
310
                100
                                     105
313 Gln His Gln Ile Lys Trp Glu Trp Val Lys Gly His Ala Gly His Pro
                                 120
            115
317 Glu Asn Glu Arg Cys Asp Glu Leu Ala Arg Ala Ala Met Asn Pro
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                                                 140
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318
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322 145
                         150
                                             155
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326 <211> LENGTH: 216
327 <212> TYPE: PRT
328 <213> ORGANISM: Mouse EST
330 <400> SEQUENCE: 5
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341
344 Ala Phe Val Arg Ser Ser Ser Ser Pro Asp Gly Ser Lys Gly Gln Glu
        50
345
348 Ser Ala His Glu Gln Lys Ser Gln Ala Lys Thr Ser Lys Arg Pro Arg
349 65
                         70
352 Glu Pro Leu Val Val Val Tyr Thr Asp Gly Cys Cys Ser Ser Asn Gly
353
356 Arg Lys Arg Ala Arg Ala Gly Ile Gly Val Tyr Trp Gly Pro Gly His
                100
357
360 Pro Leu Asn Val Arg Ile Arg Leu Pro Gly Arg Gln Thr Asn Gln Arg
                                                     125
                                 120
361
            115
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DATE: 09/02/2005

TIME: 14:08:22

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Input Set : D:\ISIS-5138.ST25.txt
                Output Set: N:\CRF4\09022005\J616009.raw
364 Ala Glu Ile His Ala Ala Cys Lys Ala Val Met Gln Ala Lys Ala Gln
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        130
                            135
365
368 Asn Ile Ser Lys Leu Val Leu Tyr Thr Asp Ser Met Phe Thr Ile Asn
                                            155
                                                                160
                        150
369 145
372 Gly Ile Thr Asn Trp Val Gln Gly Trp Lys Lys Asn Gly Trp Arg Thr
                                        170
                    165
373
376 Ser Thr Gly Lys Asp Val Ile Asn Lys Glu Asp Phe Met Glu Leu Asp
                                    185
                                                        190
377
                180
380 Glu Leu Thr Gln Gly Met Asp Ile Gln Trp Met His Ile Pro Gly His
                                200
                                                    205
            195
381
384 Ser Gly Phe Val Gly Asn Glu Glu
                            215
        210
385
388 <210> SEQ ID NO: 6
389 <211> LENGTH: 26
                         envalid response- see iten 10 on Ever fummary
390 <212> TYPE: DNA
391 <213> ORGANISM: (DNA
393 <400> SEQUENCE: 6
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398 <211> LENGTH: 28
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400 <213> ORGANISM DNA
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409 <213> ORGANISM DNA
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417 <212> TYPE: DNA
418 <213> ORGANISM: ( DN)
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426 <212> TYPE: DNA
427 <213> ORGANISM: DNA
429 <400> SEQUENCE: 10
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                                     lesse correct this ever in subsequent sequences
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434 <211> LENGTH: 34
435 <212> TYPE: DNA
436 <213> ORGANISM: DNA
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RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/616,009

442 <210> SEQ ID NO: 12

439 cctcatcctc tatggcaaac ttcttaaatc tggc

DATE: 09/02/2005

PATENT APPLICATION: US/10/616,009

TIME: 14:08:23

Input Set : D:\ISIS-5138.ST25.txt

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
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Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | F | ILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO |
|--------------------|----------------|----------------------------|-------------------------|-------------------------|-----------------|
| . 10/616,009 | 009 07/08/2003 | | Stanley T. Crooke | ISIS-5138 | 1016 |
| 32650 | 7590 | 10/24/2005 | | EXAM | INER |
| | | SHBURN LLP | | WOLLENBERG | GER, LOUIS V |
| ONE LIBER PHILADEL | | CE - 46TH FLOOR A 19103 | RECEIVED | ART UNIT | PAPER NUMBER |
| | | | | 1635 | |
| | | OCT 2 7 2005 | DATE MAILED: 10/24/2005 | DATE MAILED: 10/24/2005 | |

Woodcock Washburn

Please find below and/or attached an Office communication concerning this application or proceeding.

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OCT 2 7 2085

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United States Patent and Trademark Office

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WASHINGTON, DC 20231
www.uspto.gov

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. 10/616,009 7/8/2003 Crooke et al. ISIS-5138



EXAMINER

Louis V. Wollenberger

ART UNIT PAPER

1635

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding. Commissioner of Patents

This application contains sequence disclosures that are encompassed by the definitions for nucleotide and/or amino acid sequences set forth in 37 CFR § 1.821(a)(1) and (a)(2). However, this application fails to comply with the requirements of 37 CFR §§ 1.821 through 1.825 for the reason(s) set forth on the attached Notice To Comply With Requirements For Patent Applications Containing Nucleotide Sequence And/Or Amino Acid Sequence Disclosures. (See attached RAW SEQUENCE LISTING ERROR REPORT)

APPLICANT IS GIVEN A ONE MONTH EXTENDABLE PERIOD WITHIN WHICH TO COMPLY WITH THE SEQUENCE RULES, 37 CFR §§ 1.821 - 1.825. Failure to comply with these requirements will result in ABANDONMENT of the application under 37 CFR §1.821(g). Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR § 1.136. In no case may an applicant extend the period for response beyond the six-month statutory period. Applicant is requested to return a copy of the attached Notice to comply with the response.

HOW TO SEND SEQUENCES TO THE USPTO

Please direct all replies to the United States Patent and Trademark Office via one (1) of the following: (The addresses below are effective 5 June 2004.)

- 1. Electronically submitted through EFS-Bio (http://www.uspto.gov/ebc/efs/downloads/documents.htm, EFS Submission User Manual ePAVE)
- Mailed to:
 Mail Stop Sequence
 Commissioner for Patents
 P.O. Box 22313-1450
 Alexandria, VA 22313-1450
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 U.S. Patent and Trademark Office
 Mail Stop Sequence
 Customer Window
 Randolph Building
 401 Dulaney Street
 Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Louis V. Wollenberger whose telephone number is 571-272-8144. The examiner can normally be reached on Mon-Fri, 8:00 am-4:30 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's acting supervisor, Andrew Wang can be reached on 571-272-0811. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

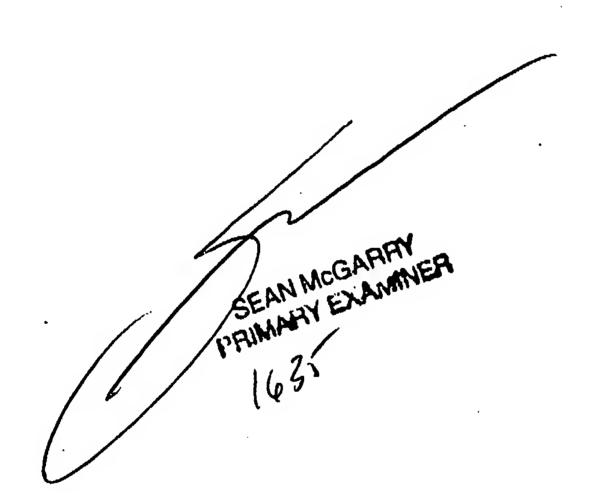
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval system (PAIR). Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-

direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public. For more information about the PAIR system, see http://pair-direct.uspto.gov. For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.

Louis V. Wollenberger, Ph.D. Examiner
Art Unit 1635

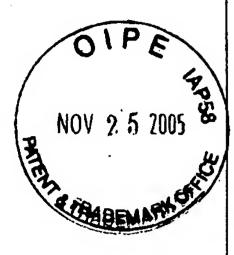
October 3, 2005



Notice to Comply

| 10/616,009 | Crooke et al. | | |
|-----------------------------------|------------------|--|--|
| Examiner Louis V. Wollenberger | Art Unit 1635 | | |

NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES



Applicant must file the items indicated below within the time period set in the Office action to which the Notice is attached to avoid abandonment under 35 U.S.C. § 133 (extensions of time may be obtained under the provisions of 37 CFR 1.136(a)).

The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 C.F.R. 1.821 - 1.825 for the following reason(s):

- 1. This application clearly fails to comply with the requirements of 37 C.F.R. 1.821-1.825. Applicant's attention is directed to the final rulemaking notice published at 55 FR 18230 (May 1, 1990), and 1114 OG 29 (May 15, 1990). If the effective filing date is on or after July 1, 1998, see the final rulemaking notice published at 63 FR 29620 (June 1, 1998) and 1211 OG 82 (June 23, 1998).
- ∑ 2. This application does not contain, as a separate part of the disclosure on paper copy, a "Sequence Listing" as required by 37 C.F.R. 1.821(c).
- 3. A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 C.F.R. 1.821(e).
- 4. A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 C.F.R. 1.822 and/or 1.823, as indicated on the attached copy of the marked -up "Raw Sequence Listing."
- 5. The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A Substitute computer readable form must be submitted as required by 37 C.F.R. 1.825(d).
- ☐ 6. The paper copy of the "Sequence Listing" is not the same as the computer readable from of the "Sequence Listing" as required by 37 C.F.R. 1.821(e).
- 7. Other: See the attached RAW SEQUENCE LISTING ERROR REPORT (generated 9/2/05). The sequence listing submitted on Aug. 25, 2005, fails to comply for the reasons given therein.

Applicant Must Provide:

- An initial or substitute computer readable form (CRF) copy of the "Sequence Listing".
- An initial or substitute paper copy of the "Sequence Listing", as well as an amendment specifically directing its entry into the application.
- A statement that the content of the paper and computer readable copies are the same and, where applicable, include no new matter, as required by 37 C.F.R. 1.821(e) or 1.821(f) or 1.821(g) or 1.825(b) or 1.825(d).

For questions regarding compliance to these requirements, please contact:

For Rules Interpretation, call (571) 272-2510

For CRF Submission Help, call (571) 272-2501/2583.

PatentIn Software Program Support

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To Purchase Patentin Software......703-306-2600

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| GRAY SCALE DOCUMENTS | |
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